DOCUMENT RESUME

ED 252 059 FL 014 711

AUTHOR Woodbury, Anthony C.
TITLE Switch Reference, Syntactic Organization, and Rhetorical Structure in Central Yup'ik Eskimo. Sociolinguistic Working Paper Number 98.
INSTITUTION Southwest Educational Development Lab., Austin, Tex.
SPONS AGENCY National Inst. of Education (ED), Washington, DC.
PUB DATE Jul 82
NOTE 35p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Discourse Analysis; *Eskimo Aleut Languages; *Form Classes (Languages); Rhetoric; *Sentence Structure; Sociolinguistics; *Syntax
IDENTIFIERS *Yupik

ABSTRACT

Yupik language has two devices to indicate switch reference. The rules generally given for them are not entirely correct, and counterexamples to the ideal have been found previously. A subset of those counterexamples in Central Yupik Eskimo support the claim that there are two systems, partially overlapping and partially unique, that organize discourse. One of these is a system of inflectional categories and the surface syntactic analysis it presents, and the other is a system of rhetorical structure, the structural analysis of the surface utterance that is evident from intonation, external sandhi, and sentence adverbial particle choice and placement. Neither system's syntactic analysis can be fully predicte from the other's. The switch reference that is entirely determined by the inflectional system is considered to be the ideal switch reference by both speakers and grammarians. However, research must proceed at both the clause/sentence level and the discourse level. (MSE)

SWITCH REFERENCE, SYNTACTIC ORGANIZATION, AND RHETORICAL STRUCTURE IN CENTRAL YUP'IK ESKIMO

by

Anthony C. Woodbury
The University of Texas at Austin

Sociolinguistic Working Paper
NUMBER 98

July, 1982

Southwest Educational Development Laboratory
211 East Seventh Street
Austin, Texas

SWITCH REFERENCE, SYNTACTIC ORGANIZATION, AND RHETORICAL STRUCTURE IN CENTRAL YUP'IK ESKIMO

Anthony C. Woodbury

0. Introduction

Eskimo languages of both the Yupik and Inuit branches apparently all have two devices which indicate switch reference. One, the appositional mood, is used to mark a clause in apposition to another clause with which it shares a (transitive or intransitive) subject, not totally unlike English while...-ing complements. The other, which William Jacobsen calls 'non-canonical' in his seminal article inaugurating switch reference as a notion for general linguistics (Jacobsen 1967) is the reflexive versus plain third person distinction-- sometimes called fourth vs. third person-- which indicates that a noun phrase is, respectively, coreferent or non-coreferent with the (transitive or intransitive) subject of a controlling clause in a specific structural relation to it.

An interesting aspect of these devices is that the rules generally given for them, and which I have given here, are not entirely correct. This observation is not new. Samuel Kleinschmidt and Knut Bergsland, in their grammars of West Greenlandic Inuit (Kleinschmidt 1851, Bergsland 1955) both discuss and offer interpretations for the diverse counterexamples that arise in actual texts; Bergsland does this in very great detail. I would like to argue here that a subset of the counterexamples to the ideal, at least in the form they take in Central Yup'ik Eskimo, lead to a set of conclusions about discourse organization.[1] In particular, the actual pattern of use of switch reference in Central Yup'ik-- as opposed to the ideal version of it-- supports the claim that there are two systems, partially overlapping and partially unique, which organize discourse in Central Yup'ik. One of these is the system of inflectional categories, and the surface syntactic analysis it presents: it is in terms of the inflectional notions

of subject, transitivity, clause, and sentence that the ideal version of switch reference is formulated. The other is the system of rhetorical structure, by which I mean the structural analysis of the surface utterance in Central Yup'ik that is evident from intonation, external sandhi, and sentence adverbial particle choice and placement. Particularly in narrative, units of rhetorical structure often set the boundaries within which switch reference operates, even when they are at variance with inflectionally defined units like clause and sentence. In § 1 I take up switch reference as it reflects the inflectional system, and in § 2, as it reflects rhetorical structure. Conclusions are presented in § 3.

My discussion here is confined to Central Yup'ik, an Eskimo language of the Yupik branch spoken in Southwest Alaska between Norton Sound in the north, and the Alaska Peninsula in the south.[2] The description of ideal switch reference should be applicable in most details to all languages in the family; because little or no work has been published on the discourse-level prosodic systems of Eskimo languages, I cannot make the same claim for my discussion of switch reference as it relates to rhetorical structure.

The Central Yup'ik word consists of a base, followed optionally by one or more postbases (derivational suffixes), followed by an inflectional ending: a noun ending in the case of nouns, a verb ending in the case of verbs, but no inflectional ending in the case of particles. Words of all three classes may then optionally be followed by one or more enclitics. A unit consisting of base plus postbase is called a complex base, or simply a base if its internal structure is irrelevant. Thus the word kegglanggerrsugnaqluteng=llu 'and they probably had saws' consists of the noun base kegglar- 'saw', the verbal postbases -nggerr- 'to have...', and *yugnarqe- 'probably to...', the verb ending *luteng (appositional mood, reflexive third person plural intransitive subject), and the enclitic =llu 'and'. The base plus postbase combinations kegglanggerr- 'to have saws'

and kegglanggerrsugnarqe- 'probably to have saws' are both complex verb bases, or simply verb bases if internal structure is irrelevant. In citations of examples, postbases are segmented when necessary, inflectional endings are given in italics, and enclitics are preceded with '='. All segmentations in examples themselves are at the phonological level represented by the orthography.

1. Switch reference in the system of inflection.

Before considering uses of switch reference devices, it will be useful to survey the categories signalled or implied by the system of inflection. This will further serve to provide a basis for understanding the overt syntax of example sentences.

1.1. The system of inflection.

Every noun ending contains marking for singular (s), plural (p), or dual (d) number, as well as for case. There are two purely syntactic cases, the absolutive (AB), which marks intransitive subject (S) and transitive object (O), and the relative (RL), which marks transitive subject (A) (i.e., the case function more generally known as ergative), and possessor. The five remaining cases are oblique, with primarily adverbial meaning: modalis (MD) 'from...; about...'; some patients of verbal action; terminalis (TM) 'to, toward...'; localis (LC) 'in, at, on...'; vialis (VL) 'across, via, using...'; and equalis (EQ) 'like...'. In abbreviations, case precedes number, e.g., ABp 'absolutive plural', EQd 'equalis dual'.

When a nouns is possessed, its ending cross-references the person and number of the possessor; the possessor may or may not be present as an independent noun phrase: qayaq 'kayak-ABs', qayaa 'his-kayak-ABs', angutem qayaa 'man's-RLs his-kayak-ABs = the man's kayak-ABs'. The persons are (plain) third (3), reflexive third (3R), first (1), and second (2), and all occur as singular, plural, or dual. Examples: qayai 'his-kayaks', with plain third person singular possessor, absolutive plural possessum, abbreviated AB(3s-p); qayartek 'the-two's-own-kayak', with

third reflexive dual possessor, absolutive singular possessum, abbreviated AB(3Rd-s); qayagemni 'at/on-my-two-kayaks', with first person singular possessor, locative dual possessum, abbreviated LC(1s-d).

Every verb ending contains marking for the mood of the clause its verb governs. The fourteen moods are divided in four sets. Independent moods-- indicative (IND), interrogative, and optative (OPT)-- occur in main clauses only, and express illocutionary force. The appositional mood (APO), which is in a set by itself, generally marks clauses that either are appositive or subordinate to other clauses, and whose subjects are usually coreferent with the subjects of those other clauses. The participial moods-- transitive participle and intransitive participle-- mark either nominalized subordinate clauses, or main clauses with a kind of exclamatory force. The oblique moods mark subordinate clauses functioning as adverbial modifiers to the clauses to which they are subordinated: consequential 'when, because...', contingent 'whenever...', conditional 'if, when...', concessive 'although...', precessive 'before...', contemporative 1 'at the time...', contemporative 2 'while...'.

In addition to marking mood, every verb ending cross-references the person and number of the S (if intransitive) or A and O (if transitive) of the clause its verb governs. The S, A, or O may or may not be present as an independent noun phrase; if so, S and O are of course in the absolutive, and A in the relative cases: ner'uq 'he-is-eating-IND(3s)'; angun ner'uq 'man-ABs...= the man is eating'; neraa 'he-is-eating-it-IND(3s-3s)'; angutem neraa 'man-RLs...= the man is eating it'; angutem nega neraa 'man-RLs fish-ABs...= the man is eating fish'. There are two exceptions to the general rule just given. First, the appositional mood ending cross-references S and O, but not A. Second, while cross-references distinguish 3, 3R, 1, and 2 person in the appositional and oblique mood endings, only 3, 1, and 2 are distinguished in the independent and

participial mood endings.

In abbreviations of glosses for verb endings, mood precedes person and number of S or of A and O, e.g., IND(1s) = 'indicative mood, first person singular S'; CONSEQUENTIAL (3Rs-3p) = 'consequential mood, reflexive third person singular A acting on (plain) third person plural O'.

The system of inflection defines certain units and categories beyond those which are overt, i.e., person, number, possession, S, A, O, transitivity case, and mood. One is subject, which is simply the grouping or S and A. In fact, it is overt in certain well-known morphological patterns (see for example Reed et al. 1977:155, 167, interrogative mood paradigms), as well as covertly in the workings of switch reference devices. Two others which are important to us here are clause and sentence. The verb endings imply a notion of clause with the category of moud and with the notions S, A, and O. The fact that only independent and participial moods occur in main clauses implies a notion of sentence, or--to be more exact--of major sentence.

1.2 Switch reference devices: the "ideal" version.

The plain vs. reflexive third person opposition, and the appositional mood, are both formally a part of the inflectional system, as is clear from the preceding section.

When a third person possessor is coreferent with the subject of a controlling clause, it is treated as 3R person, and is marked as such by means of a 3R person cross-reference in the ending of the possessed noun. Otherwise, it is treated as plain third person. Usually, the controlling clause is the clause in which the possessed noun-- and hence also the possessor in question--occurs;

1 macireluk'	-taukut	alliqsani	P	alliqsai	P
(she) exposed them to heat APO(3p)	those ABp	her-3R bootliners AB(3Rs-p)	(Pause)	his-3 bootliners AB(3s-p)	

(she) exposed her bootliners-- his bootliners-- to heat [8d:36]

(Speech error and self-correction, from a text where a woman exposes her husband's bootliners to heat despite his warnings; note that while the English gloss uses her vs. his to keep track of referents, the Yup'ik uses 3R vs. 3 person)

2 cuut akuliitgun P enminun uavet P anelraqiN-
people's$_i$ through their-3$_i$ to his-3R$_k$ to there he$_k$ went forward
RLp middle$_j$ VL(3p-s) place$_1$ TM(3Rs-s) TM OPT(3s)
He$_k$ went forward through the middle$_j$ of the crowd$_i$ to his$_k$ usual seat$_1$. [3:89]

In (1) the subject of the controlling clause is the implied A of macireluk' '(she) exposed them to heat'; the speaker's error was in identifying the bootliners' possessor with the subject, rather than the husband. In (2), the possessor of enminum 'to his place' is coreferent with the S of anelraqil' 'he went forward', and hence is 3R; cuut 'people's', the possessor of akuliitgun 'through their middle', is not, and hence is plain third person. Sometimes the controlling clause is the clause directly superordinate to that in which the possessed noun occurs: an example of that is uikani 'her-3R future husband, in subgroup 6c in the appendix.

When a third person S, A, or O of a clause is coreferent with the subject of a controlling clause, it is treated as 3R person, and is marked as such by means of a 3R person cross-reference in the ending of the verb of its own clause. Otherwise, a third person S, A, or O is treated as plain third person. For S, A, or O of oblique mood clauses, the controlling clause is always the one to which the oblique mood clause is directly subordinate. For S or O of appositional mood clauses-- which as noted do not mark A-- the controlling clause is generally

a clause to which the appositional mood clause is subordinate, or in apposition. As noted above, S, A, and O of independent and participial mood clauses cannot be treated as 3R person. This may be regarded as following from the general rule insofar as independent mood clauses always, and participial mood clauses sometimes, occur as main clauses, and are subordinate to nothing. Nevertheless, even when a participial mood clause is subordinate to a clause with a subject coreferent to its own S, A, or O, it does not mark 3R person. Further, though an independent mood clause can have an appositional mood clause with a coreferent subject in apposition to it, the independent mood ending never marks this with 3R person.

The following illustrate 3R vs. 3 person in oblique mood clauses:

3 wangkugneng -tawaam tangvakuneng P aavurciiqut
us 2 MDd however if they-3R see they will be amused
CONDITIONAL (3Rp) IND(3p)
If they see the two of us, they will be amused. [3:100]

4 puyur -camirnarqellruuq maani maqiqetnallratni
smoke ABS it was really quite alot to take IND(3s) here LC when they-3 were taking firebaths CONTEMPORATIVE 1 (3p)
The smoke in here was really alot to take when they took firebaths. [11a: p. 70]

5 neg'arcani =gguq P qanpecugtuq P
when he-3$_i$ released it is said he$_j$ cried out IND(3s)
him-3R$_j$ CONSEQUENTIAL (3s-3Rs)
And when he$_i$ released him$_j$, he$_j$ cried out. [3:76]

6 anguamegnegu -taw' caqutelliak
when they-3R$_i$ caught him-3$_j$ then they$_i$ roughed him$_j$ up
CONSEQUENTIAL (3Rd-3s) IND(3d-3s)
when they$_i$ caught him$_j$, they$_i$ roughed him$_j$ up. [11a: p. 101]

7 piqarreqkaku quyatuyartua tawa
if he would once in a while I would have been then
ask it CONDITIONAL (3s-3s) most grateful IND(1s)
If one (of you) had once in a while asked (me) about it, I would have been most grateful each time [14c:14]

In (3), the conditional clause S is 3R because it is coreferent with the indicative clause S; in (4), the contemporative 1 clause S is plain third person because it is not coreferent with the indicative clause S; in (5), the consequential clause O is 3R because it is coreferent with the indicative clause S; in (6), the consequential clause A is 3R because it is coreferential with the indicative clause A; in (7), the conditional clause A and O are both 3 because neither is coreferential with the indicative clause S. In these examples, the controlling clauses are all indicative mood, though others, including non-independent moods, can serve this function.

The 3R vs. 3 person opposition works the same way in the appositional mood, but because that mood is also a switch-reference device of sorts, the two interact. The appositional mood, unlike the 3R vs. 3 person opposition, is a restrictive switch reference mechanism, and can only be used if its subject, and the subject of the controlling clause, are coreferential. If the subjects are not coreferential, an entirely different construction must be used; because there is no construction which has all the syntactic and semantic effects of the appositional-- a loose

stringing-along of propositions in apposition, and an implication of simultaneous or sequential time relation between them--one might guess there to be some functional pressure to use the appositional even when the coreference conditions are not strictly met.[3] In any case, this restrictiveness, along with the facts that the appositional (i) cross-references only S and O, but not A, and (ii) makes use of the same notion of 'controlling' clause as the 3R vs. 3 person opposition, leads to characteristic inflectional consequences:

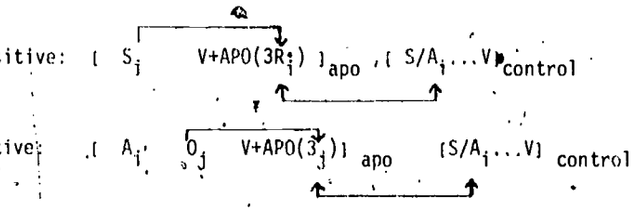
8 'akuruk̲araunani =kiq -taun' maqituuq
he-3R$_i$ not using water APO(3Rs) I wonder that one$_i$ ARs he$_i$ customarily bathes IND(3s)
Does that fellow bathe without using water, I wonder? [11b:2]

9 Taw'=am -taw' akuliignun aqumluni P
then but then to their area in between$_k$ TM(3d-s) he-3R$_i$ sitting APO(3Rs)
pilliak tawaten kevemrruutassiirlukek
he$_i$ tends to do to them$_j$ IND(3s-3d) thusly-EQ (he$_i$) testing (his$_j$) ability to levitate them$_j$ a little APO(3d)
But then he$_i$ would sit down between them, and would test to see if (he$_i$) could levitate them$_j$ a little. [9a:11]

In (8) the S of the appositional clause is coreferent with the S of the indicative clause; as a result, the S of the appositional clause is 3R person. In (9), the S of the first appositional clause and the A of the second appositional clause are coreferent with the A of the indicative clause. As a result, the S of the first appositional clause is 3R person. However, the A of the second appositional clause, though one would expect it to be 3R person, is not marked at all because the appositional cross-references S and O but not A; the O of the second appositional

clause is cross-referenced, and shows plain third person because it is not coreferent with the subject of the indicative mood controlling clause.

The interaction between reflexive vs. plain third person and the appositional mood can be diagrammed as follows (assume S, A, and O are all third person):



The subject of the appositional clause must be coreferent with the subject of the controlling clause. When the appositional clause is intransitive, its S will therefore be cross-referenced as 3R in the appositional ending. When the appositional clause is transitive, its A will have to be coreferent with the subject of the controlling clause but its O will not be. One would expect 3R person A but plain third person O, but since the A is not marked in the appositional endings, only plain third person O appears. In effect, then, the appearance of 3R person in an appositional ending indicates intransitivity, and the appearance of 3 person indicates transitivity.

The notion of 'controlling clause' used so far in this discussion of the appositional mood is tried by utterances such as:

11 Aa tawante=ll' piqerlun' qac'uqreskan aqvaqurlun'
oh then and doing APO(3Rs) when it$_j$ runs out CONDITIONAL (3s) he$_i$ runs APO(3Rs)

tagqerrlun' p taprualug -man'' -taw' imegluku
he$_i$ goes back up APO(3Rs) gut rope$_j$ ABs this ABs$_j$ then (he$_i$) rolls it$_j$ in APO(3s)

Oh, well then, when (the gut rope$_j$) runs out, he$_i$ runs, and then comes back up (from the firepit), rolling the rope$_j$ in (as he goes). [13b:192]

Here, there is a chain of appositional mood clauses (the conditional clause qac'uqreskan 'when it runs out' is subordinate to aqvaqurlun' 'he runs'). The S's of the first three appositional clauses and the un-cross-referenced A of the fourth are all coreferent. Because the clauses are exactly parallel, it is impossible to say which one controls which; nevertheless, it is clear that the two switch reference devices, 3R vs. 3 person and the appositional mood, are acting together, since the first three intransitive appositional verb endings cross-reference 3R person S, while the last, transitive appositional verb ending cross-references 3 person O, following the pattern in (10). The switch reference devices together serve to maintain a particular referent as subject from clause to clause, but that is all that the inflectional system really does in these appositional chain constructions at the clause and sentence level. Because these constructions lack a main clause in an independent or participial mood, they are not sentences, as the term is defined inflectionally. In short, aside from switch reference, they are syntactically unshaped by the inflectional system. As it happens, appositional chain constructions are a mainstay of Yup'ik narrative; they figure prominently in the discussion in § 2.

In summary, then, (1-9) illustrate ideal cases of switch reference, where it is wholly dependent on inflectionally signalled or implied notions like clause, sentence, subject, and transitivity; (11) shows a construction where this inflectional analysis is less certain.

2. Switch reference and rhetorical structure.

In addition to inflectionally signalled units such as clause and sentence, switch reference in Central Yup'ik is bounded by units of rhetorical structure, that is, a hierarchy of structural units in the surface utterance evident from

intonation, external sandhi, and sentence adverbial choice and placement. My concern with rhetorical structure grows from recent work by Dennis Tedlock, Dell Hymes, William Bright, Sally McLendon, and Joel Sherzer, among others (see Tedlock 1972, Hymes 1977, 1980, Bright 1979, McLendon 1981, Sherzer 1981 as a sample), which argues that narrative performance is best rendered in a kind of line, verse, and stanza poetic or dramatic format, providing more powerful literary effect, more faithful translations, and better insight into meaningful structural patterns at the discourse level. In applying this to Central Yup'ik, I have attempted to give structural definitions for such units as they occur in the language, and to identify their functions in both discourse and syntax (Woodbury 1980). Here, I outline the system in Central Yup'ik, and then show how its units constrain the domain in which the 3R vs. 3 person opposition and the appositional mood operate.

2.1. The system of rhetorical structure.

Table 1 shows the units of rhetorical structure, from the smallest to the greatest. These units are illustrated in the opening several sections of a narrative text in the appendix. The reader will find it helpful to continue to refer to that text for concrete illustration of what follows.

Most important for our purposes here are lines, and groups (of lines). Lines are made up of one or more minimal intonation units, which in turn are made up of one word, or of several words joined by sandhi. A minimal intonation unit has one of four basic intonation contours, shown in Table 2.

In the Hooper Bay-Chevak dialect of Central Yup'ik with which I worked, the basic pattern for all four contours is a falling pitch up to and including the first stressed syllable, and a slight step-rise at each stressed syllable thereafter (though sometimes pitch holds steady rather than rises). After the last stressed syllable, the two lead-in contours preserve or raise pitch, but may lower it again slightly in the final syllable; the two core contours show an abrupt

Table 1: Units of rhetorical structure.

Word. Has independent phonological and morphological definitions. Is smallest unit capable of carrying a single intonation contour.

Minimal intonation unit. Consists of one or more words carrying a single intonation contour. Sandhi joins words in minimal intonation units containing more than one, and is noted in transcription with a hyphen.

Line. Consists of one or more minimal intonation units, and is bounded by pause and/or breath and/or emphatic closure of an intonation contour. First word in a line is often followed by enclitics.

Group. Consists of one or more lines, with characteristic internal sequencing of basic intonation contours (see (12)). Pauses between groups tend to be longer than pauses between lines. First word of a group usually followed by enclitics, and is often a sentence adverbial particle.

Section. Consists of one or more groups, bounded by long pauses and tending to end with short groups with B^0 contour (see Table 2). Felt to have unity of content by speakers.

drop to low level. The attenuated contours are versions of the non-attenuated forms, with lesser loudness, lesser pitch range, and a tendency to become voiceless after the last stressed syllable.

The line consists of one or more minimal intonation units conforming to the following formula:

$$12 \qquad A^{m}_{0} + A^{\circ n}_{0} + B^{p}_{0} + B^{\circ q}_{0}$$

By this formula, A+A is a well-formed sequence in a line, as are A°+B+B, A+B+B°+B°+B°, and B alone; *B+B+A and *B°+B are ill-formed. In lines, one, two, and three intonation units are common; four or five are rare. Lest this seem too formal and arbitrary, note that the order reflects a successive lowering in pitch, and, for attenuated versions, a decay in articulatory energy; it is an attempt to make specific a set of general processes of downdrift, and it probably errs most in recognizing four stages along this path, rather than a continuum.

Groups also conform to the formula for intonation contour sequence in (12). Each line is considered as having the contour of its last minimal intonation group, thus, an A+B line is reckoned to be B, a B+B° line is reckoned to be B°, and so on. In a simple group, the succession of lines follows the formula above. In a complex group, however, one simply marks off subgroups where ever a violation occurs. Thus in the text in the appendix, group 4 is divided into three subgroups to account for the transition from A+A° (reckoned as A°) to A+A (reckoned as A) in the second and third lines, and the transition from B to A+A° (reckoned as A°) in the fourth and fifth lines. From one line to the next in simple groups and in subgroups, there is thus the same downdrift that is implied by the order A before A° before B before B° as is found within lines. There is also a steady drop of pitch from one subgroup to the next in complex groups like 4 and 6 in the text in the appendix: for that reason, one knows that complex groups are in

Table 2: Basic intonation contours, having function of marking units of rhetorical structure. (Terms high, low, etc. have value relative to the rest of the contour.)

CONTOUR NAME	SYMBOL	DESCRIPTION
Lead-in	A	Step-rise to last stressed syllable, followed by high-level or rising pitch
	↗	
Attenuated lead-in	A°	Slight step-rise to last stressed syllable, followed by high-level pitch, often becoming voiceless in final unstressed syllables
Core	B	Step-rise to last stressed syllable, followed by rapid drop to low-level
Attenuated core	B°	Slight step-rise, or low level, to last stressed syllable, followed by slight drop to low(er) level, often becoming voiceless in final unstressed syllables

fact integral wholes, rather than collections of discrete simple groups put together for arbitrary reasons.

Groups, subgroups, and occasionally lines are marked off by the occurrence of enclitics and sentence adverbial particles accompanying the first word, and/or of initial sentence adverbial particles. The following examples are from the text in the appendix: group 1 has =wa 'there is...', group 3 has =gguq 'it is said', group 4 has the sentence adverbial particle taw' 'then' initially and =gguq after the second word, group 5 has the sentence adverbial particle cuna=gguq 'so it happened' (=gguq lexicalized here) plus =am 'indeed' and taw', and group 6 has the sentence adverbial particle kiitawani=gguq 'so in the course of time' (=gguq lexicalized here too) plus taw'; subgroup 4b has taw', subgroup 4c has =gguq, =am, and taw', with taw' following the second word as well, and subgroup 6b has taw'; line 3 of group 2 has =llu 'and' and =gguq, and line 2 of group 6 has taw'. The degree to which intonationally identifiable units of rhetorical structure coincide with the placement of enclitics and sentence adverbial particles lends considerable strength to the claim that a system of rhetorical structure such as has been described here actually exists in the language.

What are the functions of rhetorical structure in Central Yup'ik? Semantically-- and this is very rough-- the lead-in seems to set the stage, while the core contains the main body of the message. Attenuated contours often contain afterthoughts or additions, as in the last lines of the subgroup 4c in the appendix. Syntactically, rhetorical structure cannot be said merely to be read off, that is, determined by, inflectionally signalled surface syntactic structure, for it often carries original, non-recoverable syntactic information. The effects on switch reference, discussed in § 2.2, provides one of the arguments for this conclusion. Another is provided by the fact that although rhetorical structure often corroborates constituent structure, as defined by the inflectional system,

the segmentations it provides do not correspond to a unique syntactically justifiable immediate constituent analysis.

The analysis of rhetorical structure given here is actually the skeleton of the system, that is to say, an analysis of rhetorical structure with respect only to the function of creating units in discourse. There are also intonation contours and sentence adverbial particles which signal affective meaning. Affective intonation contours make up a large, complicated, and seemingly open-ended class, and can be thought of as superimposed on the skeletal system of basic intonation contours. An example is line 3 of group 6 in the appendix, marked A^{aff}. According to Leo Moses, the son of the storyteller, this contour means that the narrator has entered the mind of his character through the power of his empathy for him; I find an element of sadness and pity to it, as well. This contour is characterized by a high falling pitch extending to the last stressed syllable. In this particular example, the final unstressed syllable, taw', has a relatively high pitch and a slight end-fall; because of this, the affective contour can be seen as superimposed on a lead-in (A) basic contour. Other affective contours employ variations of voice quality and regulation of amplitude along with variations of pitch.

2.2. Bounding of switch reference devices by units of rhetorical structure.

We saw in § 1 that in the terms of the system of inflection, a (major) sentence is defined around an independent or participial mood main clause. We saw there too that chains of appositional mood clauses maintaining a particular referent as subject from clause to clause can occur. In narrative, main clauses can be scarce, while appositional chains are common. An example of this is the text portion in the appendix, where only two main clauses occur, the intransitive participle clause in line 2 of group 1, and the indicative clause in line 2 of group 6. The rest of the text portion given consists of appositional clauses, some of which are modified by oblique mood clauses, just as in (11). The

appositional clauses, however, do not maintain the same referent as subject throughout, as (11) does; there are cases-- to be discussed in detail below-- where contiguous appositional mood clauses have different rather than same subjects. From the point of view of the system of inflection, the best we can do it to say that the sentences in the passage are the two main clauses and their dependencies, and then a series of appositional chains of from one to several clauses sharing the same subject.

If one takes rhetorical structure into account, switches in subject from one appositional mood clause to another are predictable. The rule is:

13 The subject of an appositional clause must be coreferent with the subject of a controlling clause or of the other appositional clauses in its own simple group or subgroup.

This is to say, then, that there is no requirement for the subject of an appositional clause to be coreferent with the subject of any clause outside its own simple group, or subgroup. Notice that in intonational terms, this simply means that when the contour sequence A before A° before B before B° from one line to the next is broken-- that is, when a down-drifting pattern from one line to another is interrupted-- coreference is no longer required.

The 3R vs. 3 person opposition, as it occurs in appositional clauses, follows the appositional mood in obeying (13). In our consideration of the text just below, the reader can test this for himself by observing that a 3R person cross-reference to O occurs in transitive appositional endings, in keeping with the interaction shown in (10). In other situations, as for example in oblique mood clauses, the 3R vs. 3 person opposition can operate from one simple group or subgroup into the next if its controlling clause, as defined in § 1.2., is in a different simple group or subgroup from it.

Let us now examine (13) in light of the text portion in the appendix. Group 1 is a single intransitive participial main clause with no switch-reference devices, and (the people of the) village as subject. They are maintained as subject in the two appositional clauses at the beginning of group 2; from the point of view of the system of inflection, there is absolutely no reason why they should not be considered to be a continuation of the sentence begun in group 1, in apposition to the main clause there. In lines 3-4 of group 2, there is a new appositional clause with a new subject, the great hunter. This appears to violate (13) because group 2 is a simplex group; I will return to this below. In group 3 two concessive mood clauses are each subordinate to the appositional mood clause uingevkayuunaku taum nukalpiarata 'their great hunter didn't permit her to marry'. Because neither has the great hunter as either A or O, the two concessive clauses have no 3R person cross-references, but tauna...panini 'that daughter of his' has a 3R person possessor, because the great hunter is the A of the appositional mood controlling clause. As a whole, it can be seen that group 3 maintains the subject established in lines 3-4 of group 2. Group 4 introduces a new subject in the appositional clause making up lines 1-2, i.e., making up subgroup 4a. The appositional clause which makes up subgroup 4b introduces yet another subject, the intended husband. 4c reintroduces the father as subject, and the plain third person A and O of the concessive clause nulirrniangraaku 'even though he asked for her hand' show that it is controlled by the following appositional mood clause. Group 4 is especially interesting in that it has three lone appositional clauses, each of which introduces a new subject, and constitutes a subgroup. Notice that there can be no notion of controlling clause for the appositional mood and the 3R vs. 3 person opposition there. Group 5 is another single appositional clause introducing a new subject. Subgroup 6a is a classic major sentence, with an appositional clause whose subject--the father--is coreferential with the subject

of the controlling main clause in the indicative. The appositional mood clause uingyugpegnan'-taw' 'she did not want to get a husband' in subgroup 6b has two consequential mood clauses subordinated to it. One of these, nengaqercam' 'because she was in seclusion', is in the same subgroup, and the other, taun' uikani pintupkenrilatgu.'because they did not approve of her intended husband', is in another subgroup. In these oblique mood clauses, the 3R vs. 3 person distinction is therefore able to mark coreference with the subject of the controlling clause whether it is inside or outside the same subgroup.

Returning to the anomaly in group 2, the solution that suggests itself is to consider the first two lines as a subgroup 2a, and the second two as a subgroup 2b. This is supported by the occurrence of the enclitics =llu 'and' and =gguq 'it is said' after the first word of the third line. The fact that the second and third lines both have lead-in contours weakens the hypothesis that subgroup boundaries are marked by violations of the contour sequence in (12); on the other hand, the situation would be more grave if line 2 were a lead-in but line 3 were an attenuated lead-in or a core.

The affective aspects of rhetorical structure also can set boundaries for switch reference in appositional mood clauses, as the following complex group from a lengthy myth narrative told by the late Mary Kokrak of Chevak shows:

14 hi

mp maaten=ggur- itraameng (1.3) A^aff When they went upstream
when =iis. when they-3R went upstream CONSEQUENTIAL(3Rp)

apuryarturait (0.7) A° and were about to reach them$_j$
when they were about to reach them IND(3p-3p)

very hi

mf ceryarpag- nenglaq-- nenglarluteng (0.8) A^aff there was lots of noise those people$_j$ were laugh
lots of noise they-3R laughing APO(3Rp)

hi

curtulriit=llu=gguq pikegkut (1.7) A° and the ones up there$_j$ peeking down through the smoke-hole window
and those that were peering =&=iis. those up there ABp
through(the window) INTR. PARTICIP. (3p)

Brittle creaky voice

hi mid

nenglarluteng (0.9) B^aff were laughing
they-3R laughing APO(3Rp)

mid

mp mayulljut (1.5) B° they$_j$ climbed up
they climbed up IND(3p)

[3:58]

[In this story, the hero, disguised as an old woman, and his companions, approach the communal house of an alien village, where the hero's younger brother is being tortured for public amusement.]

By the methods already discussed, the first two lines, and the last four, each would constitute a subgroup. The people laughing replace the protagonists as subject in line 3. Note, however, that the subject changes once again from line 5 to 6, so that the appositional clause in line 5 cannot have the indicative clause in line 6 as its controlling clause (and, in terms of the system of inflection, lines 5 and 6 are parts of separate sentences). This change in subject is accompanied by a change in affective aspects of intonation and prosody: brittle creaky voice changes to ordinary narrative voice; amplitude returns from mezzoforte to mezzopiano; and pitch drops from the higher register to the lower.

A final observation should be made. The rule in (13) and the discussion of (14) claim that the operation of switch reference devices in the appositional mood is in part dependent on rhetorical structure. It would not be possible to turn this around, and say that chains of coreferent appositional mood clauses define new discourse units each time they switch subjects, and that intonation, sentence adverbial particle and enclitic placement then follow suit. This is because not all rhetorical structure boundaries occur at switches of subject, as we have seen. Moreover, the mere fact of a switch gives no clue to just which intonation contour sequence will occur.

3. Conclusions.

We have seen that switch reference in Central Yup'ik is in part dependent on the syntactic analysis presented by the system of inflection, and in part dependent on that presented by the system of rhetorical structure. Neither system's syntactic analysis can be fully predicted from the other's. But it may legitimately be asked whether my analysis is overly preoccupied with the interplay of two formal-functional systems, and whether in fact both the inflectional system and the system of rhetorical structure might be the overt marks of a more abstract notion of the sentence as a discourse unit. For example, one might claim that

each simple group or subgroup in the text portion in the appendix is a sentence, except in cases like subgroup 6c, which is clearly subordinate to the appositional clause in 6b, by inflectional criteria. According to this claim, just as inflectional criteria group 6c with 6b, criteria of rhetorical structure lead one to treat the first two lines of group 2 as part of a sentence separate from that in group 1.

I would object to this sort of abstract functionalist solution, because it steers one away from distinguishing the kinds of meanings and functions that the language handles with its inflectional system, vs. the kinds it handles with its system of intonation, sentence adverbial particles and enclitics. Cross-linguistic generalizations on this point would be extremely valuable if found, because they would point to non-arbitrariness in the pairing of form and function in language.

On a purely descriptive level, I think that a reduction of the two systems relative to the function of marking off discourse units could obscure certain interesting phenomena: why, for example, is the consequential mood clause in subgroup 6c accorded its own subgroup, and how is that to be differentiated from oblique mood clauses occurring in the same subgroup (or simple group) as the clauses they modify?

Finally, it is interesting to reconsider the sense in which switch reference that is entirely determined by the system of inflection is "ideal" switch reference (as discussed in §1). One encounters this "ideal" switch reference all the time in elicited Yup'ik sentences, Yup'ik speakers' translations of English sentences, and even in naturally occurring Yup'ik conversational exchanges. I have found out that these sentences, contextualized pragmatically rather than embedded in long stretches of narrative text, are readily judged by speakers as making grammatical or ungrammatical use of switch reference forms, while long successions of appositional clauses taken out of the narrative context and submitted for

grammaticality judgement are often objected to, or treated with uncertainty, on this point. As an experiment, on several occasions, I quoted to speakers a group consisting of appositional clauses and one switch of subject from a text, attempting to reproduce the original prosody as accurately as possible. One person rephrased the utterance by putting two clauses in the indicative, one just before the switch, and the other at the end of the group, thereby making two separate (inflectional) sentences; two others asked me if I had heard it in a story! From this it is clear that rhetorical structure, at least in the form it takes in narrative, is so much a property of whole discourses, that its contribution to syntax is obscure out of the discourse context. Further, and perhaps as a result, use of switch reference forms in all short utterances submitted for grammaticality judgement tends to be judged according to inflectional criteria only: at this limited level, then, it becomes the speaker's as well as the grammarian's ideal. (It goes without saying that such problems never arise when a text is considered as a text.) Because the system of inflection tends to operate at lower levels--sentence, clause, phrase, and word--it is clear that evaluation of grammaticality in its terms does not require an entire discourse context. The methodological and theoretical conclusion is inescapable. If one aspect of a phenomenon is discoverable through research at the clause and sentence level, and another at the discourse level, and if the data are evaluated differently by speakers according to which level the researcher decides to investigate, then it follows that research and theory must proceed at both levels.

FOOTNOTES

* I wish to thank Leo Moses and the many others in Chevak, Alaska who made substantial contributions to my linguistic investigations there. Financial support for my fieldtrips to Chevak was generously provided by the Melville and Elizabeth Jacobs Research Fund of the Whatcom Museum Foundation, Bellingham, Washington (1978), the Urgent Anthropology Small Grants Program, Center for the Study of Man, Smithsonian Institution (1978), the Phillips Fund of the American Philosophical Society Library (1978, 1980), and the National Science Foundation (1980). I alone am to be held accountable for claims made here, and for all errors of fact and interpretation which may exist here.

[1]There is also a substantial body of counterexamples involving differing interpretations of coreference and of the notion of subject (e.g., underlying subject vs. surface subject vs. true semantic agent), among others.

[2]Central Yup'ik data come from narrative and conversational texts I recorded in Chevak, Alaska in 1978 and 1980, where the Hooper Bay-Chevak dialect, one of four Central Yup'ik dialects, is spoken. Transcription is in the standard Central Yup'ik orthography described in Reed et al. 1977 and Miyaoka and Mather 1979, with these modifications to accomodate the Hooper Bay-Chevak dialect: ww for w to represent /x^{w}/, which occurs only medially in Hooper Bay-Chevak, e.g., atawwa for standard atawa, to represent /ataax^{w}a/ 'blessing'; w for ɣ or y, to represent /ɣ^{w}/. e.g., tawani for standard taɣani or tavani, 'to represent /taɣ^{w}aani/ 'there'. Citations of text are labelled with text number, followed by colon, followed by sentence or page number (depending on the text's stage of preparation), all enclosed in

square brackets, e.g., [8d:36] = 'text 8d, sentence 36'.

For more on Central Yup'ik, see Reed et al. 1977, which focuses on the General Central Yup'ik dialect, the most widespread of the four. For more on Hooper Bay-Chevak, and on the methods and approach taken in my own investigations, see Woodbury 1981.

[3] Many of the counterexamples mentioned in footnote 1, as well as certain peculiar usages, can be seen as functionally motivated by pressure to employ the appositional mood when its coreference conditions are not met.

REFERENCES

Bergsland, Knut. 1955. A Grammatical Outline of the Eskimo Language of West Greenland. Oslo: University of Oslo Mimeo.

Bright, William. 1979. A Karok Myth in "Measured Verse": the Translation of a Performance. Journal of California and Great Basin Anthropology 1:117-23.

Hymes, Dell. 1977. Discovering Oral Performance and Measured Verse in American Indian Narrative. New Literary History 8.431-57.

____. 1980. Verse Analysis of a Wasco Text: Hiram Smith's "At'unaqa". IJAL 46:65-77.

Jacobsen, William H. Jr. 1967. Switch Reference in Hokan-Coahuiltecan. Studies in Southwestern Ethnolinguistics: Meaning and History in Languages of the American Southwest, ed. by Dell Hymes and W. Bittle. (Studies in General Anthropology, 3). Mouton: The Hague.

Kleinschmidt, Samuel P. 1851. Grammatik der Grönländis.en Sprache. Berlin [Reprinted 1968, Hildesheim: George Olms Verlagsbuchhandlung.]

McLendon, Sally. 1981. Meaning, Rhetorical Structure and Discourse Organization in Myth. Georgetown University Round Table on Languages and Linguistics, ed. by Deborah Tannen. Washington, D.C.: Georgetown U. P.

Miyaoka, Osahito, and Elsie Mather. 1979. Yup'ik Eskimo Orthography. Bethel, AK: Kuskokwim Community College, Yup'ik Language Center.

Reed, Irene, Osahito Miyaoka, Steven A. Jacobson, Paschal Afcan, and Michael Krauss. 1977. Yup'ik Eskimo Grammar. Fairbanks, AK: University of Alaska, Alaska Native Language Center and Yup'ik Language Workshop.

Sherzer, Joel. 1981. The Poetic Structures of Kuna Discourse: A Sociolinguistic Perspective. Paper read at University of Texas at Arlington Conference on Linguistics and the Humanities, March, 1981.

Tedlock, Dennis. 1972. Finding the Center: Narrative Poetry of the Zuni Indians. New York: Dial. [Second edition 1978, Lincoln, NE: University of Nebraska P.]

Woodbury, Anthony C. 1980. Rhetorical Structure in Central Yup'ik Eskimo Narrative. Paper read to the Annual Meeting of the Linguistic Society of America, San Antonio, TX, December 28, 1980.

____. 1981. Study of the Chevak Dialect of Central Yup'ik Eskimo. (University of California, Berkeley Doctoral Dissertation). Berkeley, CA: University of California, Dept. of Linguistics.

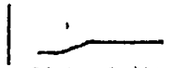
APPENDIX

The following is the first two sections of a quliraq ('tale') told by Thomas Moses in Chevak, Alaska, to Mary Moses, J. R. Moses, and the author, November 9, 1978. In the transcription, lines which are followed by pauses show pause length in parentheses to the right. At far right, intonation contour type (see Table 2) is given for each line, and above each line, actual intonation contours are traced, with a vertical line marking off each minimal intonation unit (see Table 1). Double hyphen (--) follows false starts; voiceless segments are marked with subscript [$_{o}$].

Section I

Group 1. nunat=wa -taukut (0) A

there was a village ABp those ABp

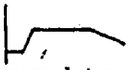


etliniaqelriit (0) A

they$_{A}^{-3}$ existed INTR. PART. (3p)

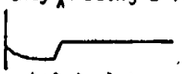
kuigem ciñiini (3) A+B

river's RLs at its$_{A}^{-3}$ bank LC(3s-s)



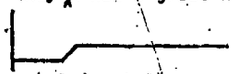
Group 2. nunauluteng (0) A

they$_{A}^{-3}$R being a village APO(3Rp)



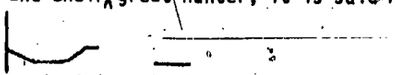
nukalpiarluteng (0) A

they$_{A}^{-3}$R had a great hunter APO(3Rp)



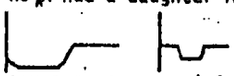
nukalpiarat=llu=gguq (0) A

and their$_{A}^{-3}$ great hunter, it is said AB(3p-s)



paning'e'qerrluni (3) B

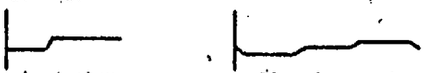
he$_{A}^{-3}$R had a daughter APO(3Rs)



Group 3. tauna=gguq panini (1) A+A

that one ABs his$_{A}^{-3}$R daughter AB(3Rs-s)

ui-- ui-- (0.5)



pingraatgu nulirrniangraatgu (0.3) A+A

even though they$_{A}^{-3}$ said to her$_{P}^{-3}$ CONCESSIVE (3p-3s)

even though they$_{A}^{-3}$ asked her$_{P}^{-3}$ to be (their) wife CONCESSIVE (3p-3s)

uingevkayuungky (1) A

(he) never let (her) have (any) one$_{A}^{-5}$ as a husband APO(3s)

taum -nukalpiarata (3) B°

that RLs their-3 great hunter RL(3p-s)

Group 4 4a. ut-- (1)

taw' -ui-- uikarautengqerrsaaqluni=gguq (2) A

then but she-3R had someone in particular in mind as a future husband APO(3Rs)

angutet -iliitneng-taw' nekevyugmeng (3) A+A°

men RLp one of them-3 MD(3p-s) young man MDs

b. taum-taw' uikarautiin (1) A+A

then that one RLs her-3 intended husband RL(3s-s)

nulirrniaryaaqluku (5.5) B

(he) tried in vain to get her-3 as a wife APO(3s)

c. nulirrniangraaku=ggur=am-taw' at-- atiin-taw' (0.5) A+A°

but even though he-3 tried to get her-3 as a wife CONCESSIVE (3s-3s) her-3 father RL(3s-s)

tupkevkenak' -taun' nulirrniartii (3) A+B°

(he) did not approve him-3 APO(3s) that one ABs he who tried to get her-3 as a wife AB(3s-s)

angun (1.5) B°

man ABs

nuliqsugtii (3) B°

he who wanted to have her-3 as a wife AB(3s-s)

Group 5. cyna=ggur=am-taw' nengaqerrlun' (4) A+B°

so it happened she-3R withdrew in anger APO(3Rs)

Group 6 6a. kiitawani=gguq-taw' taum -at-- atiin-taw' (0.3) A+A°

then in the course of time that RLs her-3 father RL(3s-s)

uingesqelluk'-t ping'eyaaqaa (0.3) A+B°

(he) wanting her-3 to get a husband APO(3s) he started in vain to tell her IND(3s-3s)

b. ui-- uingyugpegn[ani]-taw' (0.2) A^aff

she-3R did not want to get a husband APO(3Rs)

nengaqercam' (0) A°

because she-3R was in seclusion CONSEQUENTIAL (3Rs)

c. taun' -uikaq-- uikani (1) A

that ABs her-3R future husband AB(3Rs-s)

pin-- tupkenrilatgu (5) B°

because they-3 didn't approve him-3 CONSEQUENTIAL (3p-3s)

Translation

1. There was a village (of people)
   and they stayed
   on a river bank.

2. They were a village
   they had a great hunter
   and their great hunter
   had a daughter.

3. Now this daughter of his
   she marr--
   even though (the men) all tried to get her as a wife
   she wasn't permitted to marry
   by that great hunter.

4a. Ret--
   Now sh-- she had someone in particular in mind to be her husband,
   one of those young men
4b. and this intended husband of hers
   tried and tried to get her hand in marriage
4c. but even though he asked, her father
   wouldn't approve this suitor
   (this) man
   the one who wanted to take her as a wife.

5. And so she withdrew in anger.

6a. Well as time went on her fath-- father
   tried and tried to get her to have a husband.
6b. oh sh-- she did not want a husband
   because she was in seclusion
6c. (because) her intended husband
   said-- was not approved by them.